

coupling plate portion 11S of the other link member 10, and the through hole 13 and the lock protrusion 14 are aligned in the top-bottom direction. The coupling plates 11 of the link members 10 that are thus lined up are displaced upward one after another from the end by at least the protrusion length of the lock protrusions 14.

[0052] Next, pressure is applied such that a downward force is applied to the fitting portions of all the link members 10. Consequently, the through hole 13 and the lock protrusion 14 of adjacent link members 10 are fitted together one after another from the end, and ultimately the fitting of all the link members 10 is completed. In this regard, in the fitting portion of each link member 10, the claws 17 of the lock protrusion 14 are brought into contact with a peripheral portion around the through hole 13 and the legs 16 are elastically deformed inward of the through hole 13. Upon the through hole 13 having been moved and positioned below the claws 17, the legs 16 elastically restore their original shape, and thus the claws 17 are locked to the upper surface side of the peripheral portion around the through hole 13. In this way, the link members 10 are coupled together all at once. At this time, the coupling plates 11 of all the link members 10 are aligned in terms of the height, i.e., the electrical wire guide G extends in the horizontal direction.

[0053] As shown in FIGS. 12 and 13, the link members 10 coupled together are configured to be rotatable relative to one another. Specifically, adjacent link members 10 rotate such that the outer surface 25 of the first guide 23F and the curved surface 26 of the second guide 23S slide along each other. When the relative angle between adjacent link members 10 reaches a predetermined angle, one of the inclined surfaces included in the first contact surface 21 of the first angle limiter 19F abuts against the first receiving surface 15F of one leg 16 out of one pair of legs 16, and one of the inclined surfaces included in the second contact surface 22 of the second angle limiter 19S is brought into contact with the second receiving surface 15S of the other leg 16. Thus, further rotation of adjacent link members 10 is restricted. Note that when adjacent link members 10 rotate, the claws 17 of the lock protrusion 14 are displaced along the inner surface 24 of the first guide 23F.

[0054] Next, the wire harness W is held within the electrical wire guide G thus assembled. The wire harness W including an electrical wire, to which a connector and a terminal fitting (not shown) are attached at its terminal portion, is inserted via the opening 33 and is housed within the electrical wire holder 27. In this way, since it is possible to pass the wire harness W into the inside of the electrical wire holder 27 from the opening 33, it is therefore unnecessary to perform the task of passing the wire harness W in the lengthwise direction of the electrical wire guide G in a conventional manner. Therefore, when performing the task of passing the electrical wire, it is unnecessary to perform the task of protecting the terminal fitting connected to the terminal portion of the electrical wire using a protection tube or the like. Also, it is unnecessary to take into consideration design matters such as displacing the terminal fitting in the lengthwise direction by adjusting the length of the electrical wire in order to prevent the diameter of the wire harness from being large.

[0055] Thus, the task of assembling the electrical wire guide G is completed.

[0056] Next, the actions and the advantageous effects of the embodiment having the above-described configuration are described.

[0057] The electrical wire guide G according to the present embodiment includes a plurality of link members 10 that are lined up along one direction, and are coupled together so as to be rotatable relative to each other. The link members 10 are respectively provided with: through holes 13 that penetrate in a top-bottom direction; and lock protrusions 14 that are each provided with a claw 17 that is locked to a peripheral portion around the corresponding through hole 13 and protrudes upward. The link members 10 are coupled together by the lock protrusions 14 being locked to the through holes 13.

[0058] With this configuration, it is possible to couple the link members 10 together by pressing each fitting portion in the top-bottom direction. Therefore, it is possible to easily fit the plurality of link members 10 together all at once.

[0059] Also, the lock protrusions 14 are configured to be elastically deformed when passing through the through holes 13, and the link members 10 are respectively provided with angle limiters 19 that are in contact with the lock protrusions 14 in a direction intersecting a direction in which the lock protrusions 14 are elastically deformed, and that limit a rotation angle of adjacent link members 10 relative to each other to a predetermined angle. With such a configuration, the lock protrusions 14 are not deformed when being brought into contact with the angle limiters 19, and it is possible to limit the rotation angle of the link members 10 by using the lock protrusions 14.

[0060] The link members 10 respectively have electrical wire holders 27 in which a wire harness W is housed and held, and the electrical wire holders 27 are respectively provided with openings 33 that are configured to house the wire harness W inserted from the side. With this configuration, the electrical wire holder 27 can hold the wire harness W inserted sideways, and it is unnecessary to perform the task of passing the wire harness W in the direction in which the link members 10 are lined up.

[0061] The present invention is not limited to the embodiment that has been described above with reference to the drawings, and the following embodiments, for example, are included within the technical scope of the present invention.

[0062] In the above-described embodiment, each lock protrusion 14 has a pair of legs 16. However, such a configuration is not essential, and the number of legs of each lock protrusion may be only one or three or more.

[0063] In the above-described embodiment, the legs 16 of each lock protrusion 14 are deformed when passing through the corresponding through hole 13. However, such a configuration is not essential, and the claws of each lock protrusion may be deformed instead of the legs being deformed when passing through the corresponding through hole.

[0064] In the above-described embodiment, the link members 10 constituting the electrical wire guide G are coupled together all at once. However, this is not essential, and it is acceptable that sets of a plurality of link members constituting the electrical wire guide are first coupled together at once, and then the sets of link members are coupled together.

[0065] In the above-described embodiment, the angle limiters 19 are brought into contact with the lock protrusions 14. However, such a configuration is not essential, and the angle